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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,329	10/23/2003	Thomas D. Stahl	46675-00005	8235

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EXAMINER

LEE, Y MY QUACH

ART UNIT PAPER NUMBER

2875

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/693,329

Applicant(s)

STAHL, THOMAS D.

Examiner

Lee Y Quach

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6-8, 10, 12, 13, 17-19, 21-27 and 31 is/are pending in the application.
- 4a) Of the above claim(s) 18, 19, 21-27 and 31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, 6-8, 10, 12, 13 and 17 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____  | 6) <input type="checkbox"/> Other: _____                                    |

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***DETAILED ACTION***

***Response to Amendment***

1. Applicant's election without traverse of invention I, claims 1 to 4, 6 to 8, 10, 12, 13 and 17 in the reply filed on June 10, 2005 is acknowledged. Claims 18, 19, 21 to 27 and 31 are therefore withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a non-elected invention.

***Drawings***

2. The drawings of June 25, 2004 are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference signs "16" and "40" as mentioned on page 7 in the description.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawing figures 4 to 6 of June 25, 2004 are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "34" has been used to designate both "the reflective cone" as shown in drawing figures 4 and 5 and "the empty space" as shown in drawing figure 6.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

4. Claims 2, 6 to 8, 10, 12 and 13 are objected to because of the following formalities: In claim 2, since the means for collecting light is a truncated pyramid shape, this indicates that there is no top surface. The language "said light exiting through a top surface of the means for collecting light is not proper and is incorrect. In claims 6, 10 and 13, there is no clear antecedent

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basis for "the light collector". Note the term "means for collecting light" as recited in claim 1. In claims 7 and 8, the language "the light sources **are** selected from **an** LED" is not proper. Also, the language "an LED capable of between about 1-5 watts at 1 amp" and "an LED capable of at least 80 lumens at 1 amp and 3 watts" is not proper. It would appear that the term "providing" should be inserted after the term "capable of". In claim 12, the limitation "optical elements" lacks a clear meaning within the context of claim 1. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 3 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al.

Smith et al. show a light collection system comprising means for collecting light having a plurality of surfaces (30), a housing (14) for positioning a plurality of light sources (24) to direct light toward the means for collecting light, the surfaces directing light from the light sources in a direction towards a target area (figure 1, surgical site), a first of the surfaces (30, figure 2) reflecting light from a first of the light sources (24, figure 2), a second of the surfaces (30, figure 2) reflecting light from a second of the light sources (24, figure 2), a third of the surfaces (30, figure 2) reflecting light from a third of the light sources (24, figure 2), and a fourth of the surfaces (30, figure 2) reflecting light from a fourth of the light sources (24, figure 2).

7. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Bladowski.

Bladowski shows a light collection system comprising means for collecting light having a plurality of surfaces (34, 44), a panel of light sources such as a plurality of light emitting diodes (12) positioned to direct light toward the means for collecting light, and the surfaces directing

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light from the light sources in a direction towards a target area (the lens, figures 6, 7, or the focusing light output to focusing area (column 3, line 59).

8. Claims 1 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Chuang (6,527,420).

Chuang shows a light collection system comprising means for collecting light having a plurality of surfaces (513, 515, 423, 426), a plurality of light sources (6, 60) positioned to direct light toward the means for collecting light, and the surfaces directing light from the light sources in a direction towards a target area (34) such as an image panel.

9. Claims 1 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Chuang (6,425,677).

Chuang shows a light collection system comprising means for collecting light having a plurality of surfaces (22, 31), a panel of light sources such as a plurality of light sources (111) positioned to direct light toward the means for collecting light, and the surfaces directing light from the light sources in a direction towards a target area (4) or such as an image panel (LCD, column 2, line 48).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chuang (6,425,677).

Chuang discloses the invention substantially as claimed including a plurality of parabolic concentrators (112) positioned to direct light from the light sources towards the means for collecting light with the exception of having the light sources comprised of light emitting diodes.

Note that it is old and well known that incandescent, fluorescent, discharge lamp and light emitting diode light sources are interchangeable and/or can also be used in combination. It would have been obvious to one skilled in the art to which the subject matter pertains to use the

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light emitting diodes in place of the light sources of Chuang to not only enhance reliability and longevity of the light sources but also to reduce power consumption and heat generation.

12. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al.

Smith et al. disclose the invention substantially as claimed including the surfaces having a thin film of highly aluminized reflective material or other highly reflective coating (column 3, line 33) to optimize the reflectivity of light, and since a thin film of silicon oxide is used to optimize performance, it would have been obvious to one skilled in the art that this highly reflective coating can include this thin film of material such as silicon oxide to optimize the performance of the means for collecting light.

13. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al.

Smith et al. disclose the invention substantially as claimed including a plurality of optical elements (34) selected from a disk of dichroic or other spectrum selective filter material or a refractor disk ... (column 3, lines 66 to 67 and column 4, lines 1 to 2). Smith et al. do not specify whether the optical elements having optical coatings to create a consistent set of indices of refraction. However, these optical elements would obviously include the same optical coatings to create a consistent set of indices of refraction, otherwise, the light from the light sources combined together would not properly define an illumination zone to the target area.

14. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bladowski.

Bladowski discloses the invention substantially as claimed with the exception of having the watts and amp as claimed. However, it should be noted that any light emitting diode is capable of producing 80 lumens at 1 amp and about 1 to 5 watts or 3 watts because the output of the light source is depending on the wattage and current which provides no unusual, unobvious and or unexpected result and is therefore not only deemed to fall within a purview of an ordinary engineering technique but also obvious to one skilled in the art to provide the light emitting diode of Bladowski with the lumens at the amp and watts as claimed or other different amps and watts to produce different lumen outputs to accommodate or suit different applications as desired.

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15. Claim 2 would be allowable if rewritten to overcome the objection set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y Quach Lee whose telephone number is 571-272-2373. The examiner can normally be reached on Tuesday and Thursday from 8:30 am to 4:30 pm.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service whose telephone number is 703-308-2733.

Y. Q.  
August 18, 2005



Y Quach Lee  
Patent Examiner  
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